

REMARKS

Claims 32-36 and 38-70 are pending in this application. By this Amendment, claims 32, 35, 40, 50, 60 and 65 are amended. Additionally, new claims 66-70 are added. No new matter is added by these amendments. Claim 37 is canceled without prejudice to, or disclaimer of, the subject matter recited therein. Support for the new claims can be found at least at page 14, line 3, and page 13, lines 1 and 2, of Applicant's specification.

Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested.

The Office Action objects to claims 35-37, 40, 41, 51, 54, 55, 60 and 65 because of informalities. The Office Action objects to the phrase "a classical hologram" as recited in claim 35 because it is not clear what is considered to be "classical hologram." Applicant respectfully asserts that a "classical hologram" is a well known phrase that refers to the conventional two-step rainbow hologram origination process as mentioned on page 13, lines 31-34, of Applicant's specification. Additionally, the Office Action objects to the phrase "high refractive index dielectric layer." Claim 35 has been amended to obviate this objection.

Additionally, the Office Action objects to the phrase "complementary zero-order diffractive devices," as recited in claim 36. Applicant respectfully asserts that the zero-order diffractive devices recited in claim 36 are complementary to one another, as explained on page 13, line 6, of Applicant's specification.

The cancellation of claim 37 renders the objection to the claim moot.

Furthermore, the Office Action objects to the phrase "originated by different processes," as recited in claim 40; to the term "originate," as recited in claim 41; and the phrase "from different origination processes," as recited in claim 54. Applicant respectfully asserts that term "origination" or "originated" is a term generally used in which the form of a holographic device is generated. Examples of origination techniques are mentioned on page

4, lines 9-12, of Applicant's specification. For example, the classical hologram origination technique involves forming a H1 hologram by suitably irradiating a three-dimensional object and then creating a H2 hologram from the H1 hologram.

In addition, the Office Action objects to claims 60 and 65 for informalities. Claims 60 and 65 have been amended to obviate the objection. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objections to the claims.

The Office Action rejects claims 32, 33, 38-40, 42-44, 46, 47, 50-54, 56-59, 61 and 63-65 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,128,779 to Mallik. Additionally, the Office Action rejects claims 34 and 35 under 35 U.S.C. §103(a) as being unpatentable over Mallik in view of U.S. Patent No. 5,513,019 to Cueli; rejects claims 36, 37, 48 and 49 under 35 U.S.C. §103(a) as being unpatentable over Mallik; rejects claims 41, 45 and 55 under 35 U.S.C. §103(a) as being unpatentable over Mallik in view of U.S. Patent No. 5,886,798 to Staub et al. (hereinafter "Staub"); and rejects claims 60 and 62 under 35 U.S.C. §103(a) as being unpatentable over Mallik in view of U.S. Patent No. 6,294,241 to Kaule et al. (hereinafter "Kaule"). Applicant respectfully traverses these rejections.

The Office Action asserts Mallik teaches all of the features recited in independent claims 32 and 50. However, Mallik does not teach or suggest a security device including at least a first and second superposed diffractive or holographic optically variable effect generating structures wherein "the replay characteristics of the structures are such as to generate a visually integrated image," as recited in newly amended claims 32 and 50.

Mallik, in Fig. 11, col. 9, lines 45-49 and col. 10, lines 48-50, teaches a multiple hologram structure where the resulting structure can only be viewed one at a time. However, Mallik does not teach or suggest "wherein the replay characteristics of the structures are such as to generate a visually integrated image," as recited in claims 32 and 50.

Additionally, the Office Action asserts that Mallik teaches all the features recited in dependent claim 40. However, Mallik does not teach or suggest a security device wherein "the first and second optical variable effect generating structures have been originated by different processes," as recited in claim 40. Instead, Mallik, in col. 11, lines 43-53, teaches the replication of a second hologram from a hologram which has already been originated, not the origination of another hologram by a different process.

Furthermore, Mallik does not teach or suggest a security device wherein "the first optically variable effect generating structure comprises a substantially pure grating structure defined by said surface relief microstructure, in combination with a high refractive index dielectric layer and the second optically variable effect generating structure generates diffuse diffraction," as recited in claim 35.

Similarly, Mallik does not teach or suggest a security device that combines a surface relief microstructure with "a volume hologram," as recited in new claims 66 and 68.

In addition, Mallik does not teach or suggest a security device wherein "the discontinuous metallic layer is registered with the surface relief microstructure of the first optically variable effect generating structure," as recited in new claims 67 and 69. Mallik, in col. 10, lines 50-65, teaches an all-over half-tone metallized structure which is not registered with the surface relief structure resulting in a significant portion of the holographic image to be lost.

Cueli, Staub and Kaule fail to teach or suggest the above features and therefore fail to make up for the above-noted deficiencies of Mallik.

For at least the reasons above, the applied references cannot reasonably be considered to teach or to have suggested the combinations of all the features recited in at least independent claims 32 and 50. Further, claims 33-36, 38-49 and 51-70 would also not have been suggested by the applied references for at least the respective dependency of these

claims on allowable independent claims 32 and 50, respectively, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 32-36 and 38-65 under 35 U.S.C. §102(b) and §103(a) are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 32-36 and 38-70 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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